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■ HVAC Controls ■ Electric Actuators ■ Actuated Valves
■ Humidifiers ■ Electric Heaters

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Let Us Guide You Towards the Right Path. Heater Selection Guide

We have spoken about our Electric Heater Selection Software in previous articles. This web-based tool enables you to make heater selections, view prices, generate electrical and mechanical shop drawings and even submit an order from anywhere at your convenience.

As simple as it sounds, certain basic details are required to obtain precise designs and prices. Incorrect information could result in inaccurate prices, which would cause many project revisions and could consequently delay the project or even cause you to lose the job.

Below is a quick one-sheet guide to making a precise heater selection to obtain accurate pricing and design.

Our technical support team is available to answer any questions you might have regarding the selection of your electric heaters.

Keep it simple and fine-tuned!

Note that certain components and options are automatically included when required by the codes and regulations

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1 - Selection of heating elements					
<input type="checkbox"/> Model C - Open coil elements <input type="checkbox"/> Grade C <input type="checkbox"/> Grade A		<input type="checkbox"/> Model T - Standard tubular elements <input type="checkbox"/> Incoloy 800 <input type="checkbox"/> Stainless Steel		<input type="checkbox"/> Model F - Finned tubular elements <input type="checkbox"/> Steel fins <input type="checkbox"/> Stainless Steel fins	
2 - Selection of duct type (Installation)					
<input type="checkbox"/> Type I - Slip-in		<input type="checkbox"/> Type F - Flanged <input type="checkbox"/> 1" (25.4mm) flange <input type="checkbox"/> 1.5" (38mm) flange		<input type="checkbox"/> Round collar option	
3 - Control panel details					
<input type="checkbox"/> Standard control panel <small>Extends 1" (25.4mm) on top and bottom Left extension (if required)</small>		<input type="checkbox"/> Special extension <input type="checkbox"/> Right extension <input type="checkbox"/> Bottom extension <input type="checkbox"/> Top extension <input type="checkbox"/> Centered extension		<input type="checkbox"/> Control panel flush with duct <input type="checkbox"/> Flush with top of duct <input type="checkbox"/> Flush with bottom of duct	
<input type="checkbox"/> Control panel on the bottom <input type="checkbox"/> Control panel on the top		<input type="checkbox"/> Insulated control panel 1" (25.4mm) thick insulation		<input type="checkbox"/> Remote control panel	
Degree of protection of control panel against external condition					
<input type="checkbox"/> NEMA Type 1 (IP10) <input type="checkbox"/> NEMA Type 12 (IP52) <input type="checkbox"/> NEMA Type 4 (IP56) <input type="checkbox"/> NEMA Type 4X (IP65)					
4 - Special electric heaters					
<input type="checkbox"/> Electric heater with cold section(s) <input type="checkbox"/> Cold section on control panel side; dimensions: _____ <input type="checkbox"/> Cold section opposite side of the control panel; dimensions: _____ <input type="checkbox"/> Cold section on top; dimensions: _____ <input type="checkbox"/> Cold section on bottom; dimensions: _____			<input type="checkbox"/> Process heater. Specify output temperature _____ (no thermal protection)		
5 - System information					
Air flow: _____ CFM <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical		Voltage: _____ VAC No. of phases: _____ Total power: _____ kW			
6 - Heating stage(s) details Input signal: <input type="checkbox"/> Pneumatic <input type="checkbox"/> Electric					
No. of stages	Control Signal	kW	No. of stages	Control Signal	kW
Stage 1	<input type="checkbox"/> ON/OFF <input type="checkbox"/> Modulating		Stage 3	<input type="checkbox"/> ON/OFF	
Stage 2	<input type="checkbox"/> ON/OFF		Stage 4	<input type="checkbox"/> ON/OFF	
7 - Control panel components					
Standard components:			Options:		
<input type="checkbox"/> Transformer and control fuse (TR) <input type="checkbox"/> 60 Hz <input type="checkbox"/> 50 Hz		<input type="checkbox"/> Control voltage provided by others <input type="checkbox"/> 24Vac <input type="checkbox"/> 120Vac (on-off only)			
<input type="checkbox"/> Disconnect switch by others <small>(Supplied when required by code)</small>		<input type="checkbox"/> Disconnect switch (door interlock) (DS) or <input type="checkbox"/> Toggle switch (TS)			
<input type="checkbox"/> No line or stage fuse <small>(Supplied when required by code)</small>		<input type="checkbox"/> Line fuses (LF) and/or <input type="checkbox"/> Stage fuses (SF)			
<input type="checkbox"/> Magnetic contactor (CA) <input type="checkbox"/> Full break		<input type="checkbox"/> Mercury contactor (CM) <input type="checkbox"/> Thermal relay (RT) <input type="checkbox"/> Silent relay (CS)		<input type="checkbox"/> Full break	
<input type="checkbox"/> Manual reset thermal cutout (MC)		<input type="checkbox"/> Manual reset thermal cutout (MC) <small>(Supplied when required by code)</small>			
<i>For modulating electric heaters:</i> <input type="checkbox"/> HEC Electronic controller (HEC) <input type="checkbox"/> Solid state relay (SSR)		<input type="checkbox"/> Airflow switch, fixed (PDN) or <input type="checkbox"/> adjustable (PDA)			
<input type="checkbox"/> No pilot lights		<input type="checkbox"/> Fan relay (FR) <input type="checkbox"/> Starter motor for fan, Power : ____ HP			
		<input type="checkbox"/> Auxiliary switches (normally open & normally closed) (AUX) Qty : <input type="checkbox"/> 1 per contactor or <input type="checkbox"/> 2 per contactor			
		<input type="checkbox"/> Pilot lights <input type="checkbox"/> Line Power (LP) <input type="checkbox"/> Heating ON (LH) <input type="checkbox"/> No airflow (LN) <input type="checkbox"/> Stage ON (LS) <input type="checkbox"/> Overheat (LO)			
8 - Thermostats and Sensors					
<input type="checkbox"/> STS3		<input type="checkbox"/> TRO5404		<input type="checkbox"/> TRO24-EXT1	
<input type="checkbox"/> STC8-13 + ITO3 - Duct sensor and room set point controller			<input type="checkbox"/> TMA54		
<input type="checkbox"/> STC8-13 + TRO5404 - Duct sensor and room modulating thermostat			<input type="checkbox"/> STR1		
<input type="checkbox"/> STC8-13 + HEC/ISP - Duct sensor and Internal set point controller					

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